

# REMARKS

The Office examined claims 1-19, 32, 34, 36 and 37 and rejected same. With this paper, none of the claims are amended, none are added and none are canceled.

## Claim Rejections under 35 USC §103

Claims 1-2, 7-8, 11, 13-17, 19, 32, 34 and 36-37 are rejected under 35 USC §103(a) as being unpatentable over Oh-Yang *et al.* (US Patent 6,351,820, referred to as Oh-Yang hereinafter) in view of Khouli *et al.* (US Patent 6,308,278, referred to as Khouli hereinafter).

The Applicant hereby respectfully requests a reconsideration of this final rejection.

Regarding claim 1, it has been acknowledged by the Office that Oh-Yang does not teach the following limitations of claim 1:

*the card generates an interrupt request related to the change in the mode of the card, to be transmitted via the interface to the terminal at the stage when the card shifts to the normal mode, wherein the interrupt request, received from the card and relating to the mode change, is processed in the terminal.*

However, the Office asserts that the above limitations can be found in Khouli. The Applicant respectfully disagrees. In the final Office Action, the Examiner states that:

Khouli teaches the peripheral device (e.g. LAN controller) is shifted to an active mode (e.g. wake up mode) from a non-active mode (e.g. standby mode), and as the result of this shift in mode, a SCI signal is generated by the peripheral and transferred to the computer (i.e. terminal) (Khouli, Fig. 2 and col. 6, lines 1-14), therefore, Khouli's teaching does meet the claimed limitations such that the peripheral (i.e. card) generates the SCI signal (i.e. interrupt request) relating to the peripheral shifting to the active mode from the non-active mode (i.e. change in the mode of the card), wherein the SCI signal (i.e. interrupt request) is transmitted to the computer (i.e. terminal) for processing. Therefore, Khouli does teach the mode shifting relating to the peripheral (i.e. card), and the SCI signal is to inform the computer that the peripheral has shifted from the non-active mode to the active mode (page 3, last paragraph to page 4, first paragraph of the Office Action).

The Applicant respectfully submits that, the cited passage of Khouli (col. 6, lines 1-14) in fact teaches the following:

Once the computer 200 has entered a specific power saving mode by ceasing to supply the normal voltages and supplying the standby voltages to the specific wake devices, I/O device 216 will detect any computer activity, such as mouse movement, keyboard actuation, LAN activity. Keyboard or mouse activity will cause data to be received by I/O device 216 over the mouse or keyboard serial data line of line 238. In response to detecting the mouse or keyboard or other computer activity, the I/O device

216 outputs a wake control signal over line 236 to power management device 214. If the PIIIX4 device is used as the power management device 214, the wake control signal 236 can be received by the PIIIX4 as a system management interrupt (SMI#) signal or a system control interrupt (SCI) signal.

The above paragraph does not contain any indication that a peripheral such as the LAN controller 237 was ever in a dormant/sleep state. Rather, it says that the I/O device 216 monitors activities in the peripherals such as mouse movement, keyboard actuation and LAN activity, and generates an SCI signal to wake up the computer whenever such an activity is detected.

On page 7 of the Office Action, the Examiner asserts that "it would have been obvious to one of ordinary skill in this art, at the time of invention was made to include Khouli's SCI signal into Oh-Yang's card," thus the resulting combination of the references teaches the limitations of claim 1 as recited above. The Applicant respectfully disagrees with this assertion.

The invention is based on the idea that the card transmits an interrupt request to the terminal at the stage when the card has been switched to the normal mode. Thus, the terminal may start using the card immediately, knowing that the card is in the normal mode and ready. This is more efficient than the terminal waiting for a preset period of time or transferring continual inquiries to the card to find out the mode of the card. It is therefore clear that in performing the procedure of claim 1, the terminal itself is in a wake or normal state, otherwise it would not be able to perform the first step of claim 1, *i.e.* transmitting a command to the card for changing the mode of the card from a dormant mode to a normal mode. Therefore, the Khouli reference has no relevance with regard to the method of claim 1, because it only concerns a procedure for waking up the computer, whereas in the present invention the terminal is awake.

In the present invention, a command for setting the normal mode is transmitted to the card to change the mode of the card from a dormant mode to the normal mode. This means when the command for setting the normal mode is transmitted to the card, the card may be in the dormant mode. There is no mentioning in Khouli that the LAN controller has at least one dormant mode and a normal mode. Therefore, Khouli does not explicitly teach a mode change in the LAN controller that is controlled by a command transmitted from the computer. In Khouli, the LAN controller may be idling, and the lack of activity in the LAN controller (and any other peripherals connected to the computer) may cause the computer to enter the sleep mode. Once

there is an activity in the LAN controller, the computer is woke up by the SCI signal. A lack of activity in the LAN controller does not necessarily mean the LAN controller is in a sleep mode, and Khouli never explicitly teaches that the LAN controller has different modes.

Therefore, the fundamental difference between the present invention and Khouli with regard to the above-cited claim limitations is that in Khouli, an interrupt request is generated to wake up the computer, whereas in the present invention, the interrupt request is generated for informing the host that the card has been shifted to the normal mode (= has been woken up).

Based on the foregoing, Oh-Yang and Khouli, alone or in combination, do not teach all the limitations of claim 1. Especially, neither Oh-Yang nor Khouli teaches the above-cited limitations of claim 1. Therefore, the present invention, as claimed in claim 1, is not obvious over Oh-Yang in view of Khouli. Applicant respectfully requests the rejection of claim 1 under 35 USC 103(a) be reconsidered and withdrawn.


Independent claim 7 recites a system, 13 and 16 recite a card, 17 recites a terminal, and 19 recites a mobile station. All of them correspond to the method of claim 1. Since claim 1 is believed to be patentable, these device claims are also believed to be patentable. Applicant respectfully requests the rejection of claims 7, 13, 16, 17 and 19, as well as all dependent claims in the application, be reconsidered and withdrawn.

### **Conclusion**

For all the foregoing reasons, it is believed that all of the claims in the application are allowable, and their passage to issue is earnestly solicited. Applicant's agent urges the Examiner to call to discuss the present response if anything in the present response is unclear or unpersuasive.

Respectfully submitted,

Date: 2/20/07

  
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